UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

FACT SHEET

STATEMENT OF BASIS
for
CONTAMINATION REMEDIES AT
BEAZER EAST. INC., CARBONDALE, ILLINOIS

BACKGROUND INFORMATION

The United States Environmental Protection Agency (U.S. EPA) is proposing environmental corrective action measures at the Beazer East, Inc. (Beazer) facility in Carbondale, Illinois in a *Statement of Basis* (*Statement*). You can read the *Statement* in its entirety at the Carbondale Public Library and the Region Five office in Chicago, Illinois (see below). The environmental corrective action is being performed under the authority of the Resource Conservation and Recovery Act. The *Statement* describes the proposed corrective actions and provides the rationale (or basis) for their selection. The *Statement* also summarizes the results of Beazer's investigation to define the nature and extent of contamination present at and around its facility. The purpose of the *Statement* is (1) to invite public comment on the measures that USEPA is currently proposing for site remediation, and (2) to invite proposals for alternative remedies. This Fact Sheet is a summary of the *Statement*.

SITE FEATURES

The Beazer facility, known locally as the former Koppers Company, was at one time the world's largest creosote wood-treatment plant. The plant has not operated since 1991 and is mostly dismantled. Wastes were stored or handled and released to the environment at several places within the property. Distinctive areas include the former spray field, or process area, soil waste piles, capped storage lagoons (formally closed), Glade Creek, and Smith Ditch.

NATURE AND EXTENT OF CONTAMINATION

The site is contaminated with creosote, creosote-related contaminants, pentachlorophenol (PCP), polycyclic aromatic hydrocarbons (PAHs), and arsenic in surface soils, subsurface soils, surface water, groundwater, and creek sediments. Creosote is heavier than water and is made of multiple compounds, many of which do not dissolve in water, and some that do. The term for a heavy liquid like creosote is "dense non-aqueous phase liquid," or DNAPL. The DNAPL at the facility occurs as "free-phase" contamination, which means

that it is an immiscible liquid (unable to mix or blend) in the subsurface that is capable of flowing into a well or migrating laterally or vertically through an aquifer. These wastes pose risks to human health and the environment.

REMEDIES PROPOSED BY U.S. EPA

The USEPA is proposing the following corrective action remedies at the facility:

1. The Construction of a Corrective Action Management Unit A corrective action management unit (CAMU) is a waste containment area, like a secure landfill, located within a facility's boundaries that is used for storing and managing wastes from corrective actions at that facility.

2. The Relocation of Glade Creek and the Construction of an Interceptor/Barrier Trench Creosote and contaminated groundwater discharge into a segment of Glade Creek which runs through the property. To isolate the stream from the source of contamination, Beazer would relocate a 1,600-foot segment of the stream to a clean area to the east. A trench would be excavated to an approximate 30-foot depth within the (former) Glade Creek channel to intercept creosote beneath the ground surface, for collection and shipment off-site for re-use or disposal.

3. Excavation of Glade Creek Sediment In Glade Creek, Beazer would excavate approximately 3,500 cy of visibly contaminated sediments upstream and downstream of an existing grout blanket, dewater the sediments, and transport them to the CAMU.

4. Placement of a Cover over Certain Soil Contamination A low-permeability cover would be placed on 22 acres of the "former process area" where soil contamination exceeds safe exposure levels to provide a barrier between the soil, and human exposure.

5. Extraction of Dense Non-Aqueous Phase Liquid (DNAPL) Beazer would install a DNAPL recovery well system in the former process area to collect creosote for off-site reuse or disposal. Groundwater that is extracted along with the DNAPL would be treated on-site and then routed to the Carbondale POTW.

6. Waste Pile Containment Two 10,000 cy soil waste piles that were created during an earlier remedy would be sampled to determine whether soil contamination exceeds safe exposure levels. For the purposes of this document, it is assumed that applicable criteria will be exceeded, and the waste piles would be transported to the CAMU.

7. Monitoring Contaminated Sediments Sediments of Smith Ditch, Glade Creek, Crab Orchard Creek, and Piles Fork are contaminated with creosote and other site-related constituents. Visibly contaminated sediments from portions of Glade Creek are proposed for excavation and placement within the CAMU. The proposed remedy for the

remaining contaminated sediments is monitored natural attenuation. MNA requires a monitoring program to measure its predicted effectiveness and a contingency plan to become activated, as required.

8. Backfilling and Sealing Selected Wells Thirty-seven wells that have been dropped from the site-wide groundwater monitoring network are proposed to be decommissioned as a remedy to minimize the wells' potential to serve as possible long-term migration pathways for DNAPL and site constituents between hydrologic units.

9. Elimination of Discharge Point into Smith Ditch A surface water underdrain system from the former process area discharges contaminated water into Smith Ditch. This discharge point is proposed to be eliminated during construction of the soil cover remedy.

10. Backfilling of the Small Unnamed Pond A small pond (apparently excavated) west of Glade Creek is contaminated as evidenced by an oily sheen on the water and dark, creosote-like staining along its banks. The pond is proposed to be emptied and backfilled to eliminate it as a human and environmental exposure point.

11. Institutional Controls Use-restrictions would be imposed at the facility to reduce risk of human exposure to contaminated media. Currently, the proposed controls include prohibiting the use of groundwater for drinking water, restricting future land use to industry, restricting excavation in the former process area (i.e., basements), and requiring current and future workers, including utility workers, to follow a *Health and Safety Plan.*

12. Monitoring of Groundwater Long-term post-remediation groundwater monitoring is proposed for a period of 30 years or longer. USEPA requires that the contaminated groundwater be contained within its current boundaries; a groundwater management zone will be established. Twenty-nine wells have been selected to provide site-wide coverage including the facility perimeter.

INFORMATION REPOSITORY

Beazer reports and the *Statement of Basis* are available at:

Carbondale Public Library
405 W. Main St Carbondale, IL 62901
(618) 457-0354

Record Center, USEPA, Region 5
USEPA Waste, Pesticides and Toxics Division
77 West Jackson Boulevard, 7th Floor
Chicago, Illinois 60604
Phone (312) 353-5821
Hours: Mon-Fri, 8a.m. - 4p.m.

The **Statement of Basis** is presented to the public for review and comment. The 45-day Public Comment Period is from August 5, 2003 to September 22, 2003. Please send written comments to:

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